IN THE CLAIMS

Claim 1 (original): The use of at least one agonist of receptors selected from the group consisting of the CCR3, CCR6 or CCR8 receptor or combinations thereof and a pharmaceutically acceptable carrier for treatment of progenitor and stem cells prior to and/or in the course of transplantation of the cells wherein the agonist is selected from the group consisting of receptor CCR3: Eotaxin; Eotaxin-2; Eotaxin-3 ; Hemofiltrate CC-Chemokine-1 (HCC-1); Hemofiltrate CC Chemokine-2 (HCC-2); Macrophage Inflammatory Protein - 1a (MIP-1a); Regulated on Activation Normally T-Cell Express and Secreted (RANTES); Monocyte Chemoattractant Protein - 2 (MCP-2); Monocyte Chemoattractant Protein - 3 (MCP-3); Monocyte Chemoattractant Protein - 4 (MCP-4); 2-[(6-amino-2-benzothiazolyl)thio]-N-[1-[(3,4-dichlorylphenyl)methyl]-4-piperidinyl] acetamide; of receptor CCR6: Macrophage Inflammatory Protein - 3a (MIP-3a); of receptor CCR8: I309; Macrophage Inflammatory Protein - 1ß (MIP-1ß); LAG-1; Thymus and Activation Regulated Chemokine (TARC); viral Macrophage Inflammatory Protein - I (vMIP-I); as well as derivatives therof keeping their agonist abilities.

Claim 2 (original): The use of claim 1 for improving the homing of stem cells.

Claim 3 (currently amended): The use according to ~~one or more of the foregoing claims~~ claim 1 for the transplantation of hematopoietic progenitor and stem cells, umbilical cord blood and placental stem and progenitor cells, liver stem and progenitor cells (oval cells), mesenchymal stem and progenitor cells, endothelial progenitor cells, skeletal muscle stem and progenitor cells (satellite cells), smooth muscle stem and progenitor cells, intestinal stem and progenitor cells, embryonic stem cells, and genetically modified embryonic stem cells, adult islet/beta stem- and progenitor cell, epidermal progenitor and stem cells,

keratinocyte stem cells of cornea, skin and hair follicles, olfactory (bulb) stem and progenitor cells and side population cells from diverse adult tissues.

Claim 4 (currently amended): The use according ~~one or more of the foregoing claims~~ to claim 1 to increase the sensitivity of hematopoietic stem cells to SDF-1 induced cellular signals.

Claim 5 (currently amended): The use according ~~one or more of the foregoing claims~~ to claim 1 for the treatment of leukemias, lymphoproliferative disorders, aplastic anemia, congenital disorders of the bone marrow, solid tumors, autoimmune disorders, inflammatory diseases, primary immunodeficiencies, primary systemic amyloidosis, systemic sclerosis, heart diseases, liver diseases, neurodegenerative diseases, multiple sclerosis, M. Parkinson, stroke, spinal cord injury diabetes mellitus, bone diseases, skin diseases, replacement therapy of the skin, retina or cornea, other congenital disorders, vessel diseases like atherosclerosis or cardiovascular disease.

Claim 6 (currently amended): The method of ~~the foregoing claim~~ claim 5 wherein the host patient are not conditioned.

Claim 7 (original): The method of claim 6 wherein the host patient is conditioned under sublethal, lethal, or supralethal conditions.

Claim 8 (original): The method according to claim 7 wherein sublethal, lethal, or supralethal conditions include treatment with total body irradiation, optionally followed by treatment with myeloablative or immunosuppressive agents.

Claim 9 (currently amended): The method according to ~~any one of the claims 7 or 8~~ claim 7 wherein sublethal, lethal, or supralethal conditions include myeloablative or immunosuppressive treatment

without total body irradiation.